**FUNDS FOR LEARNING**

**BRINGING TECHNOLOGY TO THE CLASSROOM**

September 6, 2001

Magalie Salas
Secretary
Federal Communications Commission
445 12<sup>th</sup> Street SW
Room TW-A325
Washington, DC 20554

DOCKET FILE COPY ORIGINAL

**RE: In the Matter of Request for Review of the Decision of the Universal Service Administrator by Fairfax County Public Schools Under FCC Docket Nos. 97-21 and 96-45**

Dear Ms. Salas:

Enclosed please find the original and four copies of the Request for Review of the Fairfax County Public Schools in the above-referenced matter.

Sincerely,

Orin R. Heend

Funds For Learning
2111 Wilson Blvd. #700
Arlington, VA 22201

In the Matter of:                                            )
                                                             )
Request for Review of the Decision of the                    )
Universal Service Administrator by                           )
                                                             )
Fairfax County Public Schools                                )        471 App. No. 266045
                                                             )
                                                             )
                                                             )        CC Docket No. 96-45
Federal-State Joint Board on Universal Service               )
                                                             )        CC Docket No. 97-21
Changes to the Board of Directors of the                     )
National Exchange Carrier Association, Inc                    )


TO:     The Commission
        Chief, Common Carrier Bureau


## REQUEST FOR REVIEW

Fairfax County Public Schools ("FCPS" or "School District") by its
representative, hereby seeks review of the Decision of the Universal Service
Administrator dated August 7, 2001, denying funding in full for Funding Request
Number ("FRN") 673750 for cellular telephone service supplied by Nextel
Communications *and* reducing funding in part for FRN 673756 for cellular telephone
service supplied by Southwestern Bell Mobile Systems.


ISSUE (FRN 673750) Nextel

Whether cellular telephone service to telephones to be used by School Based
Technology Specialists is eligible for universal service support.

**STATEMENT OF FACTS** (FRN 673750) Nextel

FCPS submitted a Form 471 application (No. 266045) for the 2001 – 2002 funding year that included a request (FRN 673750) for cellular telephone service for school district employees. After reviewing the application, the SLD rejected the funding request in full, stating that "30 percent or more of this FRN includes a request for cellular service for Technology Specialists which are ineligible to receive services based on program rules." (Attachment A)

Presumably, the SLD concluded that such service is ineligible for support because the School District was not going to use the service for "educational purposes," as program rules require. Although the SLD refers to the school staff in issue as "Technology Specialists," their correct title is "School Based Technology Specialist" ("SBTS"). As The SBTSes clearly use the service at a "place of instruction," as the rules further require, we must assume for purposes of this appeal that the place where the service is to be provided is not at issue.

During the application review process, SLD Program Integrity Assurance ("PIA") staff requested additional information in connection with the School District's request for discounts on cellular telephone service for SBTSes. The School District explained that SBTSes directly support classroom teachers *in* their classrooms, that they are full-time staff assigned to classroom work, and that they carry cell phones because they do not have an office at any other site. The School District also furnished a copy of the SBTS job description and further explained, in pertinent part, as follows (*See* Attachment B):[3]

> SBTSes are full time staff assigned to schools. Thus, there is no question that the service is provided "at a place of instruction." The SBTS is in effect, a teacher, a teacher who works directly with other teachers and students to bring electronic, curriculum-related resources into the classroom. The SBTS must be proficient in curriculum development and delivery and keep abreast of the latest educational software...The SBTS, among other things, is responsible for creating curriculum

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[3] After submitting this documentation, PIA did not request anything further, leading FCPS to believe that the matter had been resolved and that funding for the service would be approved.

and helping teachers to create lesson plans around educational software. In many instances, SBTSes teach students directly.

In addition, we direct the Commission's attention to the attached documentation that further supports the SBTSes instructional/curricular role in the classroom:

Attachment C: E-mail from SBTS Anne Schofield providing specific examples of the direct instructional and curricular development activities in which SBTSes are involved – e.g., teaching students to troubleshoot and maintain computers, co-teaching lessons with classroom teachers, creating lessons designed to satisfy the Virginia Standards of Learning.

Attachment D: Home Page of START, Students as Resources for Technology. START is an SBTS program, the purpose of which is to "provide an opportunity for students to advance their current level of technology skills while partnering with the school staff to learn together."

Attachments E and F: Typical SBTS-prepared lesson plans, one for teaching students "Technology and the Writing Process" and the other for teaching students "Social Studies-Using Outlining as a Strategy for Organizing Information."

Attachment G: An SBTS-prepared/presented "Basic Map Skills" PowerPoint presentation for students.

## DISCUSSION (FRN 673750) Nextel

In submitting this request initially, and continuing to insist that these services are, in fact, eligible, FCPS applied the Commission's two-part eligibility test. The Commission's list of E-rate eligible services, dated December 18, 2000, is unambiguous on the eligibility of cellular service. It says:

Cellular service is eligible for discount when provided for use at a place of instruction and for educational purposes. The use of the phone must support instruction (including learning in a library) or support curriculum or instruction management. (emphasis added.) Cell service for teachers, teacher aides, principals, curriculum coordinators, superintendents and librarians, for example, would be eligible.

SBTSes are school-based staff. Their job includes, among other things, developing and helping to develop specific lesson plans and presentations, as well as teaching students directly. The detailed written explanation and supporting documentation that the School District provided to PIA demonstrated quite plainly that the focus of their work is instructional and curricular in nature, and that SBTSes clearly serve a direct educational purpose in the classroom. It is also important to note that because SBTSes are not assigned to specific classrooms, the cell phone is their only means of communicating readily by phone. Therefore, contrary to the SLD's determination, cellular service to SBTSes squarely satisfies the Commission's two-part cellular service eligibility test.

The School District remains puzzled as to why the SLD rejected this request, despite the clear evidence that was submitted about the nature of the SBTSes' job. We can only guess that because their title included the words "technology specialist," it was assumed that, despite the documentation, these persons were responsible for more traditional forms of technology support, such as hardware and network maintenance, repair and trouble-shooting. While we are not prepared to concede that service to such personnel is not eligible when they work primarily in a school setting, the issue is irrelevant here, because these employees do not play the role of traditional technology support personnel. Rather, their job is to support directly the integration of technology into classroom teaching, a process that educational experts know is critical to the ultimate success of the E-rate program.

Finally, the result in this case is made even more arbitrary by application of the "30% or more rule" to deny the School District's entire funding request. The service in question constitutes approximately 31% of the overall amount of the estimated projected cost of the service for all cell phones to be placed in service during the funding year.

Because it is an approximation of charges for cellular service, including new service, that amount is certainly subject to reasonable fluctuation, depending upon ultimate usage and other factors, some of them, of course, more predictable than others. Indeed, therefore, by the end of the program year, it very well could be that the service for SBTSes amounts to 29% or less of the total amount.

FCPS had no basis to know that the SLD would deem cellular service to SBTSes to be ineligible and, in good faith, prepared and filed its funding request on the reasonable assumption (based on publicly available FCC Rules and SLD website information) that it was. It had no basis even to suspect that it might be intermixing eligible and ineligible service in one funding request. Yet, in effect, FCPS now is being punished for intermixing ineligible and eligible service in one request through the denial of funding for service that is clearly eligible under any reasonable interpretation and application of the rules. Neither the purpose for the 30% rule (to discourage applicants from improper intermixing) nor any other reasonable policy objective is served by the ensuing result. Therefore, at the minimum, the Commission should remand this matter to the SLD for further processing and grant of the undisputed portion of the FRN.

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**ISSUE** (FRN 673756) Southwestern Bell (Cingular)

Whether the SLD's decision to reduce the amount of funding requested for discounts on cellular service was in accordance with program rules.

**FACTS** (FRN 673756) Southwestern Bell (Cingular)

In its funding commitment decision letter (Attachment A), the SLD states: "FRN approved as submitted/The estimated one-time and/or monthly charge was changed to reflect the documentation provided by the applicant." To the best of the School District's knowledge, it did not provide the SLD with any documentation that would have warranted any reduction in the amount of funding requested originally.

**DISCUSSION** (FRN 673756) Southwestern Bell (Cingular)

In its decision, the SLD did not explain why it reduced the funding commitment. The School District cannot determine, therefore, whether the SLD decided to make the reduction because (a) it did not believe that the documentation supported the total amount of funding requested; (b) the request, in its view, included cellular service for ineligible staff; or (c) some other reason.

The absence of any underlying rationale for its decision effectively precludes the School District from appealing it in any meaningful way. Therefore, we request the Commission to remand this FRN to the SLD with instructions to provide the School District with a full explanation for its decision.

# RELIEF REQUESTED

FCPS requests that the funding decision of the SLD in FRN 673750 be reversed and remanded to the SLD for processing consistent with FCC Eligibility Rules and Published SLD eligibility standards. Because of the lack of notice of any need to craft its funding request differently, FCPS further requests that the SLD be instructed to process the funding request without regard to its "30% or more" processing standard. FCPS requests that FRN 673756 be remanded to the SLD with instructions to provide FCPS with a full explanation for its decision.

Respectfully submitted on behalf of
FAIRFAX COUNTY PUBLIC SCHOOLS

By: _____
    Orin R. Heend

Funds For Learning, LLC
2111 Wilson Blvd. Suite 700
Arlington, VA 22201
703.351.5070

cc:   Deborah Sansone
      IT Business Specialist
      Fairfax County Public Schools
      4107 Whitacre Road, Room V-26
      Fairfax, VA 22032

# Attachment A

## FUNDING COMMITMENT REPORT

Form 471 Application Number: 266045
Funding Request Number: 673744      Funding Status: Funded
Services Ordered: Telecommunications Service
SPIN: 143001192                     Service Provider Name: AT&T Corp.
Contract Number: RQ980000861
Billing Account Number: 8800-001-4253
Earliest Possible Effective Date of Discount: 07/01/2001
Contract Expiration Date: 09/18/2001
Pre-Discount Amount: $29,067.00
Discount Percentage Approved by the SLD: 46%
Funding Commitment Decision: $13,370.82 - FRN approved as submitted

Funding Request Number: 673750      Funding Status: Not Funded
Services Ordered: Telecommunications Service
SPIN: 143000904                     Service Provider Name: Nextel Communications of Mid-?
Contract Number: MTM
Billing Account Number: 0012073270-6
Earliest Possible Effective Date of Discount: .07/01/2001
Contract Expiration Date: 06/30/2002
Pre-Discount Amount: $192,000.00
Discount Percentage Approved by the SLD: N/A
Funding Commitment Decision: $0.00 - Inel. svcs./ or product(s)
Funding Commitment Decision Explanation: 30% or more of this FRN includes a request
for cellular service for Technology Specialists which are  ineligible to receive
service(s) based on program rules.

Funding Request Number: 673756      Funding Status: Funded
Services Ordered: Telecommunications Service
SPIN: 143000196                     Service Provider Name: Southwestern Bell Mobile Syste
Contract Number: RQ00358869239A
Billing Account Number: 914228374
Earliest Possible Effective Date of Discount: 07/01/2001
Contract Expiration Date: 06/30/2004
Pre-Discount Amount: $365,062.56
Discount Percentage Approved by the SLD: 46%
Funding Commitment Decision: $167,928.78 - FRN approved as submitted
Funding Commitment Decision Explanation: The estimated one-time and/or monthly charge·
was changed to reflect the documentation provided by the applicant.

Funding Request Number: 673767      Funding Status: Funded
Services Ordered: Telecommunications Service
SPIN: 143001422                     Service Provider Name: Verizon-Virginia, Inc.·
Contract Number: PC98127082
Billing Account Number: 118768358419295105
Earliest Possible Effective Date of Discount: 07/01/2001
Contract Expiration Date: 03/24/2002
Pre-Discount Amount: $36,675.00
Discount Percentage Approved by the SLD: 46%
Funding Commitment Decision: $16,870.50 - FRN approved as submitted

B

*axed 3:47 pm*
*#893 7/6/01*

# FUNDS FOR LEARNING
### BRINGING TECHNOLOGY TO THE CLASSROOM

July 6, 2001

VIA FAX
Mark Palmer
NECA/SLD

RE: Fairfax County Public Schools – SBTS/Cellular Service

Dear Mark:

You requested additional information concerning the school district's request for discounted cellular telephone service for School-based Technology Specialists ("SBTS") because there apparently is some question as to whether the cell service provided to the SBTSs will be provided at school sites and for educational purposes. As explained in more detail below, the service satisfies both prongs of the SLD's most recent cellular service eligibility test.

According to the SLD Eligibility List, "Cellular service is eligible for discount when provided for use at a place of instruction and for educational purposes. The use of the phone must support instruction (including learning in a library) or support curriculum or instruction management. Cell service for teachers, teacher aides, principals, curriculum coordinators, superintendents, and librarians, for example, would be eligible. Generally, cell service for school or library personnel not involved with instruction, such as cafeteria directors, maintenance personnel, facility directors, would not be eligible unless those individuals also provide instruction, in which case they would."

SBTSs are full time staff assigned to schools. Thus, there is no question that the service is provided "at a place of instruction." The SBTS is in effect a teacher, a teacher who works directly with other teachers and students to bring electronic, curriculum-related resources into the classroom. The SBTS must be proficient in curriculum development and delivery and keep abreast of the latest educational software. (See attached job description). The SBTS, among other things, is responsible for creating curriculum and helping teachers to create lesson plans around educational software. In many instances, SBTSs teach students directly. Thus, the use of the phone supports both instruction and curriculum development. Therefore, cellular service for SBTSs clearly satisfies the second or "educational purposes" prong of the eligibility test.

Moreover, even if the SLD were to find that the SBTS position is analogous to a cafeteria employee in terms of instructional/curriculum-related responsibilities, which it most definitely is not, service to the SBTS still would be eligible because the SBTS also provides instruction. As the SLD makes it very plain in its Eligibility List that cellular service to employees who are "not involved with instruction" is eligible for E-rate support, if the employees "also provide instruction."

If you have any further questions, please let us know.

Sincerely,

Orin Heend

cc: Deborah Sansone
Fairfax County Public Schools

## SCHOOL-BASED TECHNOLOGY SPECIALIST

### Definition

Under direct supervision of a principal, provides school-based technology training to teachers and staff; provides level-one technical support to teachers, students and staff; develops site-based resources to assist in training and technical support; and performs related duties as required or assigned.

### Typical Tasks (illustrative only)

Performs a wide variety of tasks associated with technology training and level-one support. Serves as primary technology trainer of the school's instructional and support staff; develops site-based resources including students, staff and volunteers, to assist in training and support; assists school with technology-related needs assessment and planning; serves as site point-of-contact for all technology-related issues; engages in professional development through coursework, membership, mentorship, and/or authorship; attends scheduled training sessions, as required; during nonteacher-scheduled workdays, assists with centrally-based technology initiatives; assists teachers in meeting the Virginia Technology Standards for Instructional Personnel; conducts student intern program.

### Supervision Received/Given

Receives direct supervision from principal and indirect guidance from area and central office curriculum and technology personnel. May provide assistance to, and coordination of, hourly employees, volunteers and students.

### Education/Experience

Any combination of education and experience equivalent to a four-year degree, plus three years of experience, with teaching endorsement(s) preferred. Must possess proficiency in computer use, desktop technologies and applicable educational software; proficiency in curriculum development and delivery; ability to communicate effectively, both orally and in writing; ability to establish and maintain good working relationships; ability to prioritize tasks and requests.

# Attachment C

Page 1 of 1

## Sansone, Debbie

| | |
|---|---|
| **From:** | Schofield, Anne |
| **Sent:** | Thursday, September 06, 2001 9:47 AM |
| **To:** | Sansone, Debbie |
| **Subject:** | RE: Urgent need for information!!!!! |

Debbie,

I'm not sure exactly what you need but there are several areas that we consistently work with kids. There is the START program (see the web site at http://www.fcps.edu/DIS/start/ for lots of information on that program (training kids to troubleshoot and maintain computers); we also model lessons - we teach a lesson so both students and teachers learn. We also co-teach when a teacher has some confidence but still needs help. We create lessons to go with the technology benchmarks and SOL content.

Hope that helps.

Anne
*Anne Schofield*
*SBTS*
*703-426-3111*
*Olde Creek ES and Center*

# Attachment D
Page 1 of 1

**Resources**

**Login to
SBTS
Resources to
enter your
Start/Swat
data**

(on the Intranet)

## Students as Resources
## for Technology
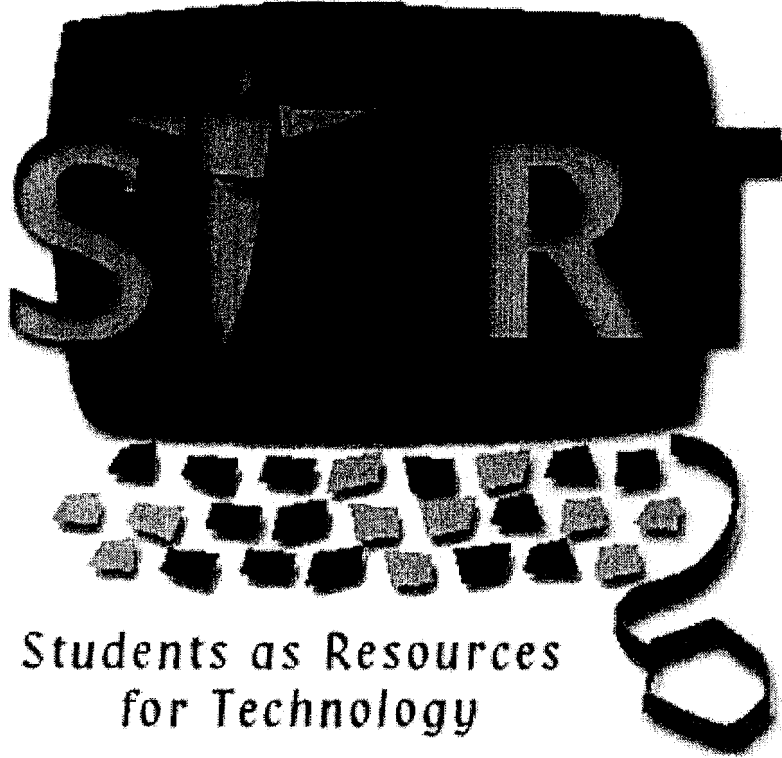
*Project Goal:*
To implement a successful student technology assistance program to provide technology and instructional support to the school community and valuable real-world experience for participating students at all school levels.

*Project Summary:*
"StART" stands for "Students as Resources for Technology". The purpose of this project is to provide an opportunity for students to advance their current level of technology skills while partnering with the school staff to learn together. This type of collaboration is very different from the traditional teacher/student relationship. It allows students to become colleagues and change agents instead of passive recipients when it comes to the infusion of technology.

This project consists of two parts:

1. Students serve as resources in the school for various technological needs. They assist with other technology-related responsibilities such as help in computer labs, install virus software, etc.
2. Students develop valuable social and communication skills when working with teachers and peers. By empowering students, teachers' workloads are reduced, student self-esteem is increased and both the teacher and student benefit from this partnership. Ultimately, students who participate in the program become a role model to their peers and serve as an informal expert, available to support friends and family.

# Paperless Writing – Technology and the Writing Process
## Step One: Prewriting

## Overview

*General Description: Prewriting with the Outline features of MSWord.*

By the end of this session participants will be able to:
- Convert a list to an outline
- Manipulate entries in an outline

## Curriculum Connection

| Primary Virginia SOL's | List corresponding FCPS POS's by number & text |
|---|---|
| 9.6 The student will develop narrative, literary, expository, and technical writings to inform, explain, analyze, or entertain.<br>Plan and organize writing.<br>10.7 The student will develop a variety of writings with an emphasis on exposition.<br>Plan and organize ideas for writing. | |

## Student Assessment

Teacher will use a checklist of students' names to record progress as they complete the steps in the writing process.

## Materials

| Software: | • Microsoft Word 2000<br>• Microsoft PowerPoint 2000 |
|---|---|
| Hardware: | • PC |
| Templates: | • Sample Outlines<br>• Writing Prompts<br>• Sample Brainstorms |

## Process

| Process | | |
|---|---|---|
| 1 | PowerPoint Presentation connecting the steps in Writing Process to technology. | |
| 2 | **Sample Brainstorm Activity:** Distribute Writing Prompts to students. | |
| 3 | Students open MS Word, type Writing Prompt onto new document | |
| 4 | Student brainstorms topic, listing words and phrases. After five minutes, students move to a computer with a different prompt and work on it for five minutes. Teacher determines how many different prompts each student is to respond to. Students return to original computer, save lists and use them to create an outline. | |
| 5 | Inspiration diagrams could also be used for Brainstorming | |
| 6 | | After completing Inspiration diagrams, go to View -> Outline |
| 7 | | Go to File -> Export, Microsoft Word RTF, Save with a good name then open in MS Word |

*Paperless Writing/Prewriting*
*Authors: Sara Tonizzo*
*Nadyne Hick*

*Instructional Technology Office, IS, FCPS*
*Session 1 of y*
*Page 1 of 3*

# Paperless Writing – Technology and the Writing Process
## Step One: Prewriting

| 8 | Making the Brainstorm into an Outline – whole class activity, using presentation station | |
|---|---|---|
| 9 | | Open Sample Brainstorm |
| 10 | | Go View -> Outline |
| 11 | | Arrange in related groups by highlighting, and using Up and Down arrows to change location |
| 12 | | Select the main idea for each group, highlight and bold the font, then move all the related ideas under it |
| 13 | | Rearrange each group into a section of outline, by highlighting, then use left and right arrows to increase or decrease the importance of the idea. Ideas may need to be added or deleted to round out the Outline. Save the Outline when complete. Exit Word |
| 14 | Open PowerPoint, Open Existing Presentation | |
| 15 | | Change Files of Type to All Files and open either the saved outline or the Sample Outline |
| | | Go to Format -> Apply Design Template and select slide design |
| | | Review slideshow, adding more details as needed to slides |
| | | Save and Close |
| | | |
| | | |
| | | |
| | | |
| | | |

## Implementation

| | |
|---|---|
| Teacher Productivity: | Teachers can use this technique for personal and professional writings. |
| One-Computer Classroom: | Students take turns or work in pairs |
| Classroom Center: | Small groups work through process |
| Lab: | Entire class works on writings at same time |

Bibliography: www.enloe.wake.k12.nc.us/enloe/english/Bowen/process.html

*Paperless Writing/Prewriting*
*Authors: Sara Tonizzo*
*Nadyne Hick*

*Instructional Technology Office, IS, FCPS*
*Session 1 of y*
*Page 2 of 3*

*These Technology Literacy Training Materials were funded by a Virginia Technology Literacy Challenge Grant*

# Paperless Writing – Technology and the Writing Process
## *Step One: Prewriting*

| Curriculum Integrations | |
|---|---|
| Social Studies | |
| Science | |
| Math | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

*Paperless Writing/Prewriting*
*Authors: Sara Tonizzo*
 *Nadyne Hick*

*Instructional Technology Office, IS, FCPS*
*Session 1 of y*
*Page 3 of 3*

# Interactive Worksheets
*Social Studies-Using Outlining as a  Strategy for Organizing Information*

## Overview

*General Description*

By the end of this session participants will be able to:
- Create and use an outline template to organize researched information on Greek gods or goddesses

## Curriculum Connection

| List Primary Virginia SOL's by number & text | List corresponding FCPS POS's  by number & text |
|---|---|
| •HSS.8.3 The student will describe, analyze, and evaluate the history of ancient Greece from about 2000 to 300 B.C., in terms of its impact on Western civilization, with emphasis on the influence of Greek mythology and religion; | Fifth Grade History • research and interpret historical information using literature, technology, and primary sources • develop strategies for organizing, analyzing, and communicating information pertaining pertaining to past and present cultures and for iintegrating the concepts learned |

## Student Assessment

List assessment opportunities that will take place in the classroom during these activities

Assessment will be on going through teacher observation of students' use of the template editing procedures. The student-revised outline will be evaluated upon completion.

## Materials
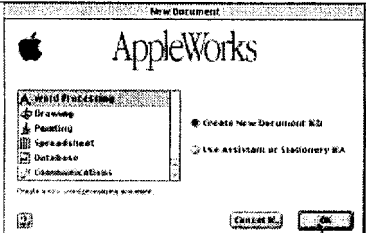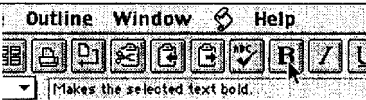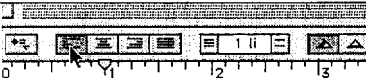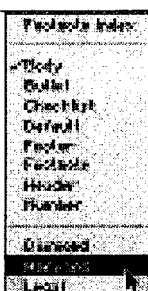
| Software: | • AppleWorks 5/0 |
|---|---|
| Hardware: | • Mac |
| Templates: | • Greek God Outline Template |

## Process

| 1 | Preparation | Before completing the template students will have located information about a specific Greek god or goddess or they may use the outline to record notes at the same as they explore digital resources. Teacher will model the process using information on a specific god or goddess. |
|---|---|---|
| 2 | Viewing the Outline Template | Double click on the icon of the Outline Temp2.cwk to open the template. |
| 3 | Creating the Outline Template | Open AppleWorks 5.0. |
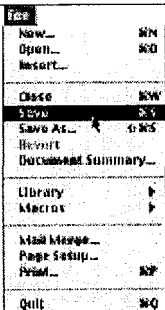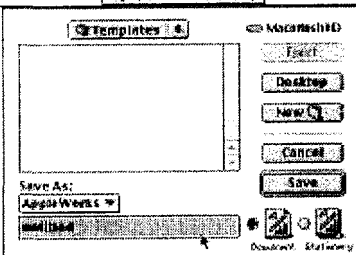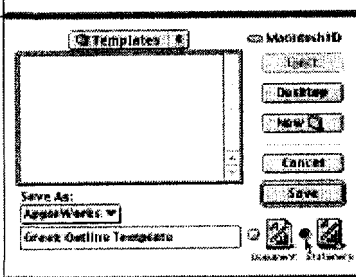
# Interactive Worksheets
## Social Studies-Using Outlining as a Strategy for Organizing Information

| 4 |  | Highlight word processing in the new document window and click OK. |
|---|---|---|
| 5 |  | Click on the center justification icon on the ruler bar. |
| 6 |  | Click on the B for bold and set the size to 18 on the button bar. |
| 7 | | Type the title "**Outline of Research on Greek God or Goddess.**" |
| 8 | | Click on B for bold again to turn it off. |
| 9 | | Press the return key twice. |
| 10 |  | Click on the left justification icon on the ruler bar. |
| 11 |  | Click on Body on the button bar and drag to Harvard. |
| 12 | | Type in the first outline topic heading, "Name of God or Goddess". Or you can use whatever topics your want. |
| 13 | | Press the return key twice and type in the next topic, "Family History". |
| 14 | | Continue in the same manner for the rest of the outline topics, "Symbol, Powers, Claim to Fame, Special Companion, Roman Counterpart". Or type whatever topics you want for your outline. |
| 15 | | Press return twice. |

# Interactive Worksheets
## Social Studies-Using Outlining as a Strategy for Organizing Information

| | | |
|---|---|---|
| 16 | | Copy and paste from the template or another word processing document in which you have saved research notes if you want to use the template for another content area outline template. |
| 17 | | Highlight all of the notes you have pasted or typed below the outline. |
| 18 | | Click on Body on the button bar as you did above, but this time drag to checklist. This creates checkboxes that you or the students can mark off as each item is copy and pasted into the outline. |
| 19 | | Click on File and drag to Save. |
| 20 | | Type a title for your template into the highlighted box in the window that appears. |
| 21 | | Click on Stationery in the lower right corner of the window. |
| 22 | | Navigate to the location where you want to save your template. |
| 23 | | Click on Save. |
| 24 | Directions for Using the | Highlight/select the word "Zeus" or the first sub topic from |
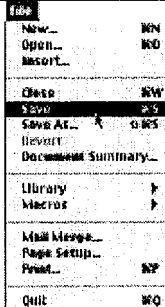
# Interactive Worksheets
## Social Studies-Using Outlining as a Strategy for Organizing Information

|  | Template | the checklist below the outline. |
|---|---|---|
| 25 |  | Click on Edit on the menu and drag to Copy. |
| 26 |  | Scroll up the document to "Name of God or Goddess" and highlight/select those words. |
| 27 |  | Then click on Edit again and drag to Paste. The word "Zeus" should replace the text "Name of god or goddess". |
| 28 |  | Go back to the checklist and click in the checkbox next to the word "Zeus" to indicate that you have placed that item correctly into the outline. |
| 29 |  | Scroll down the document and highlight/select "his father, Cronus" or a subtopic from the checklist. |
| 30 |  | Click on Edit on the menu and drag to Copy. |
| 31 |  | Scroll up the document to "Family History". |
| 32 |  | Place the cursor at the end of the line and press return. |
| 33 |  | Click on Outline on the menu bar and drag to Move Right. |
| 34 |  | Click on Edit on the menu bar and drag to Paste. The phrase "his father, Cronus," should appear as a subheading under Family History. |
| 35 |  | Go back to the checklist and click in the checkbox next to the phrase "his father, Cronus," to indicate that you have placed that item correctly into the outline. |
| 36 |  | Continue the same process to paste the other bulleted items into the correct places on the outline part of the template. |
| 37 |  | If there are any items that you do not want to include your |

Interactive Worksheets/Social Studies
Authors: Paula Messer
    Martha Short Smith

Instructional Technology Office, IS, FCPS

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# Interactive Worksheets
## Social Studies-Using Outlining as a  Strategy for Organizing Information

|  |  |  |
|---|---|---|
|  |  | can delete them from the checklist. You might want to delete the whole checklist after the outline portion is completed. |
| 38 |  | You might want to change the title of the outline to "Outline of Research on the Greek God Zeus." |
| 39 |  | Click on File and drag to Save. |
| 40 |  | Type a title for your completed outline into the highlighted box in the window that appears. |
| 41 |  | Navigate to the location where you want to save your edited version of the template. |

## Implementation

**Teacher Productivity:**

| One-Computer Classroom: | The template con be introduced with teacher computer attached to large screen monitor or TV |
|---|---|
| Classroom Center: | Students could complete their outlines of specific gods or goddesses in pairs at classroom computers on a rotating basis |
| Lab: | Students could complete their outline of specific gods or goddesses in pairs on individually in a lab session or two. |

*Interactive Worksheets/Social Studies*
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# Interactive Worksheets
*Social Studies-Using Outlining as a Strategy for Organizing Information*

## Grade Level/Curriculum Integrations

K

1

2

3 Explorer Research

4 Virginia County or Famous Virginian Research

5 Greek Gods Research or Ancient Cultures Research

6 Colony Research

G

## BASIC MAP SKILLS

Tools of the Geographer

*Presented by*
*Evangelia Ifantides and Dianna Poodiack*

*SBTS and ESOL Teacher*
*Bryant Adult Alternative H.S.*

---

*Students Working on Map Skills*

---

## Essential Learning

- Using Maps & Globes

- Applying Geographical Terms

- Plotting Latitude & Longitude

---

## Contents

- Globes
- Maps
- Types of Maps
- Geographical Terms
- Hemisphere(s)
- Latitude and Longitude
- Conclusion

---

## The Globe

A globe is:

- the best representation of the world

- a small-scale version of the "real thing"

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---

## The Globe

However, globes are

- bulky to use

- hard to store

- difficult to use to study small areas

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1

## Map Projections

Flat Maps are:

- simple to handle
- easy to store
- easy to use to study small areas

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## Map Projections

- However, flat map projections cause distortion in

**SIZE** **SHAPE**

**&** **A-R-E-A**

Back to Contents

## Review

- What is the difference between a map and a globe?

- When would it be better to use a globe and when would it be better to use a map?

- What types of distortion occur in flat maps?

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## Types of Maps

- Physical: show landforms
- Political: show man-made boundaries
- Relief: show elevation
- Special purpose: show selected information such as natural resources, population density, trade routes, etc.

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## Practice Using Maps

- Find a physical map of the world in your atlas.

  Name a mountain range.
  Name a river.

- Find a political map of Africa.

  What do the colors represent?

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## Review

- Locate the physical and political maps of South America. Compare and contrast these two maps.

- When would it be better to use a physical map?

- When would it be better to use a political map?

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## Geographical Terms

* <u>Compass Rose</u> – shows cardinal (N, S, E, W) and intermediate directions (NE, NW, SE, SW)

* <u>Legend</u> – explains the lines, colors, and symbols used on a map

Persian Gulf

| | |
|---|---|
| O | National Capital |
| ● | Secondary City |
| ---- | International Border |
| ---- | Primary Road |
| ---- | Secondary Road |
| ---- | Railroad |

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## Geographical Terms

* <u>Symbols</u> – pictures that represent something real

| | |
|---|---|
| ----- | 1949 Armistice Line |
| — — | 1967 Cease-Fire Line |
| ......... | Primary Road |
| ----- | Railroad |
| ----- | Canal |
| ----- | Underground Conduit |
| ◎ | National Capital |
| ● | City/Town |
| ∴ | Historical Site |
| ⊠ | Airfield |
| | Urban Area |
| | Israeli Settlement |
| O | (est. before 1982) |
| ● | (est. after 1982) |

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## Practice Using the Legend and Symbols on a Map

* Find the physical map of the world in your atlas.
  Locate the compass rose.
  Locate the legend.
  How many different symbols can you find?
  What type of symbols are they?
  What color represents the highest elevation?
  Name the highest mountain in the world.

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## Geographical Terms

* <u>Scale</u> – used to measure actual distances represented on a map

```
0      500    1000 km
0      250    500 mi
```

**NOTE: There are 1.609 kilometers in a mile. Math teachers love it when you can convert miles to kilometers and vice versa!**

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## Be Aware!

* Always read the legend before using a map.

  **The same color on different maps may stand for something different.**

* Always read the scale before using a map.

  **An inch on one map may equal 200 miles but on another map may equal 500 miles.**

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## Practice Using Map Scales

* Find a map of the world in your atlas.
  Locate the scale.
  How many miles equal one inch?

* Find a map of North America.
  Locate the scale.
  How many miles equal one inch?

* Find a map of the United States.
  Locate the scale.
  How many miles equal one inch?

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## Practice Using Map Scales

◈ Compare the three map scales on the maps of the world, North America, and the United States.

What conclusion can you make about map scales by comparing the scales on these three maps?

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## Review

◈ A symbol is
   A. used to show latitude.
   B. used to measure distance.
   C. used to represent something real.

◈ A legend
   A. explains the lines, colors, and symbols on a map.
   B. shows direction on a map.
   C. measures distance.

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## Review

◈ A scale is
   A. used to show latitude.
   B. used to measure distance.
   C. used to represent something real.

◈ A compass rose
   A. explains the lines, colors, and symbols on a map.
   B. shows direction on a map.
   C. measures distance.

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## Hemispheres

◈ A hemisphere is half the globe.

**Hemi** is a prefix that means half.

**Sphere** is a root word that means something in the shape of a ball.
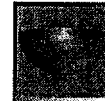
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## Hemispheres

◈ The **Equator** divides the globe into two hemispheres:

**Northern** Hemisphere
**Southern** Hemisphere

◈ The **Prime Meridian** divides the globe into two hemispheres:

**Eastern** Hemisphere
**Western** Hemisphere

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## Latitude and Longitude

◈ A line of latitude measures distance in degrees (°) north and south of the **Equator**.

The Equator is located at **0° latitude.**

◈ A line of longitude measures distance in degrees (°) east and west of the **Prime Meridian**.

The Prime Meridian is located at **0° longitude.**

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## Finding the Latitude and Longitude of World Cities

* Use your atlas to find the latitude and longitude of the following cities:

    1. Caracas
    2. Beijing
    3. Washington, D.C.
    4. Sydney
    5. Kinshasa

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## Finding the Latitude and Longitude of World Cities

* Check your results by visiting this site:

    http://www.factmonster.com/ipka/A0001769.html

* Check the cities in the United States and Canada by visiting this site:

    http://www.factmonster.com/ipka/A0001796.html

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## Finding the Latitude and Longitude of World Cities

* Use your atlas to find cities located at the following latitude and longitude coordinates:

    1. 52° N,   0°
    2. 19° N,  73° E
    3. 26° S,  28° E
    4. 38° N,  24° E
    5. 23° S,  43° W

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## Map Skills Review

* Go to www.mapblast.com
* Type your home address and zip code
* Click on Create Map

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## Map Skills Review

* Locate the compass rose.
* Locate the map scale.
* Locate your home.
* Use the Zoom In and Zoom Out buttons. Notice how the map scale changes as you Zoom In and Out. Why does the map scale change?

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## Map Skills Review

* Locate the Latitude and Longitude
* Click once on the Latitude and Longitude. The numbers should now read:
* Why do you think the numbers changed?
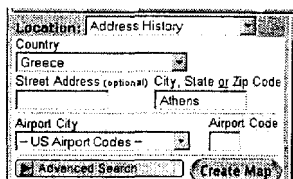* What is temperature and how is the weather today?

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### Map Skills Review

● Type a city and a country.
● Click on Create Map

Location: Address History
Country
Greece
Street Address (optional) City, State or Zip Code
Athens
Airport City          Airport Code
– US Airport Codes –

Advanced Search    Create Map

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Contents

### Map Skills Review

● Locate the compass rose.
● Locate the map scale.
● Use the Zoom In and Zoom Out buttons. How far can you zoom in?

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Contents

### After Completing This Unit

● You will understand and be able to use the basic skills and tools required of a geographer.

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Contents

### Way to Go!

# You are a genius!

Back to
Review

### OOPS!

# Try Again!

Back to
Review

### Way to Go!

# You are a genius!

Back to
Review

*OOPS!*

## Try Again!

Back to
Review

## London

Back to
Coordinates

## Bombay

Back to
Coordinates

## Johannesburg

Back to
Coordinates

## Athens

Back to
Coordinates

## Rio de Janeiro

Back to
Coordinates